LAFAYETTE AVE SAFETY IMPROVEMENTS

Traffic Calming and Bike Lane

Presented to Brooklyn Community Board 2
March 2017
Lafayette Ave Safety Improvements

Project Update

1. Before Conditions

2. Initial Implementation – June 2016

3. Design Refinements – Summer/ Fall 2016
   1. Left Turn Lane on St James Pl
   2. Left Turn Lane to Classon Ave
   3. Curb Regulation Updates
   4. Signal Timing Changes

4. Data Comparison
   1. Travel Time
   2. Traffic Volumes
   3. Bicycle Volumes
1. Before Conditions

- 2 moving lanes
- 2 parking lanes
- Shared lane bicycle route
- 60 second signal cycles
Issues
• Off-peak speeding due to excess roadway space
• Lack of dedicated space for 500+ bikes/day (12-hour count, May 2015)
2. Initial Implementation – June 2016

Traffic Calming and Bike Facility Upgrade
• Added buffered bicycle lane
• Changed to 90 second signal cycles
• Removed 1 moving lane
• Maintained 2 parking lanes
Left Turn Lane to Classon Ave

- Accommodates left turning vehicles in shorter time with no change to parking or signals

3. Design Refinements – Summer/ Fall 2016
Left Turn Lane on St James Pl
• Accommodates southbound traffic in shorter time with no change to parking or signals
Curb Regulation Updates
- Loading zones added to commercial areas along corridor
- Ensures safe deliveries at curb, out of moving lane
Off-peak Green Time at Classon Ave

- Additional green time given to Lafayette Ave at Classon Ave during off-peak hours
- Improves flow on Lafayette Ave without impacting peak hour traffic on Classon Ave
Travel Time Comparison

- Little to no impact on travel times during PM rush and overnight
  - Less than 15 second increase in travel time during PM rush (3pm-7pm)
  - 6-7 second increase in travel time evening/overnight (7pm-6am)

- Minor impact during AM and midday
  - Less than 45 second increase in travel time during morning and mid-day (6am-3pm),

### B38 Mid-Week Travel Time on Lafayette Ave from Fulton St to Classon Ave

<table>
<thead>
<tr>
<th>TIME PERIOD</th>
<th>Travel Time Before Implementation</th>
<th>Travel Time After Implementation</th>
<th>Travel Time Change</th>
<th>Travel Time Change (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:00-6:00</td>
<td>3:44 (m:ss)</td>
<td>3:50 (m:ss)</td>
<td>0:06 (m:ss)</td>
<td>3%</td>
</tr>
<tr>
<td>6:00-10:00</td>
<td>5:37 (m:ss)</td>
<td>6:21 (m:ss)</td>
<td>0:44 (m:ss)</td>
<td>13%</td>
</tr>
<tr>
<td>10:00-15:00</td>
<td>5:25 (m:ss)</td>
<td>6:01 (m:ss)</td>
<td>0:36 (m:ss)</td>
<td>11%</td>
</tr>
<tr>
<td>15:00-19:00</td>
<td>7:17 (m:ss)</td>
<td>7:32 (m:ss)</td>
<td>0:14 (m:ss)</td>
<td>3%</td>
</tr>
<tr>
<td>19:00-0:00</td>
<td>6:03 (m:ss)</td>
<td>6:10 (m:ss)</td>
<td>0:07 (m:ss)</td>
<td>2%</td>
</tr>
</tbody>
</table>

Times include B38 Limited and Local service. Limited service occurs between 7:50am and 10:04pm. Before averages consist of 1,188 individual bus trips. After averages consist of 942 individual bus trips.
LAFAYETTE AVE VOLUMES

Peak Hour Traffic Volumes
(at Cumberland St)

<table>
<thead>
<tr>
<th>Peak Hour</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>467</td>
<td>398</td>
</tr>
<tr>
<td>PM</td>
<td>611</td>
<td>640</td>
</tr>
</tbody>
</table>

Before counts taken 1/6/15-1/12/15
After counts taken 9/26/16-10/4/16

Corridor continues to process similar numbers of vehicles in the peak hour

12-hour Bike Counts (Weekday)
Before: 577
After: 671

Before counts taken 5/14/2015
After counts taken 9/27/16
LAFAYETTE AVE SPEEDS

Mid-Day Traffic Speeds (at Grand St)

<table>
<thead>
<tr>
<th></th>
<th>Exceeding Speed Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>28%</td>
</tr>
<tr>
<td>After</td>
<td>7%</td>
</tr>
</tbody>
</table>

Before counts taken January 2016
After counts taken March 2017

Speeding has decreased as travel times remain stable.

Count location is near site of building construction which may impact speeds
Questions?

THANK YOU!